ENVIRONMENTAL CHEMISTS

Date of Report: 03/16/99 Date Received: 03/11/99

Project: Metro Self Monitor, PO# M78545

Date Samples Extracted: 03/12/99 Date Extracts Analyzed: 03/12/99

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	Nickel	Zinc
M78545	0.22	0.28	0.30	0.16
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 03/16/99 Date Received: 03/11/99

Project: Metro Self Monitor, PO# M78545

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 903076-01 (Duplicate)

				Relative	
	Reporting	Sample	Duplicate	e Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	0.22	0.24	9	0-20
Copper	mg/L (ppm)	0.28	0.32	13	0-20
Nickel	mg/L (ppm)	0.30	0.32	6	0-20
Zinc	mg/L (ppm)	0.16	0.18	12	0-20

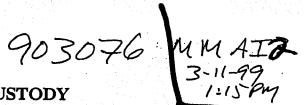
Laboratory Code: 903076-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recover	ry % Recove	ery Acceptance		
Analyte	Units	Level	Result	MS	MSD	Criteria	RPD	
Chromium	mg/L (ppm)	5	0.22	98	99	80-120	1	
Copper	mg/L (ppm)	5	0.28	97	98	80-120	1	
Nickel	mg/L (ppm)	10	0.30	96	98	80-120	2	
Zinc	mg/L (ppm)	5	0.16	100	102	80-120	2	

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recov	ery % Recov	ery Acceptanc	e	
Analyte	Units	Level	LCS	LCSD	Criteria	RPI)
Chromium	mg/L (ppm)	5	104	104	80-120	0	<u> </u>
Copper	mg/L (ppm)	5	102	104	80-120	2	
Nickel	mg/L (ppm)	10	104	105	80-120	1	
Zinc	mg/L (ppm)	5	105	107	80-120	2	

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282



SAMPLE CHAIN OF CUSTODY

Send Report To	1,-1, 0		,			11 1	,			
Company 😝	lasta Coppe	are lubies	ks .	Contac	ct back	16 25 36	Dryson			
Company Contact Contact A Thompson Address (28 thought 50.										
City, State, Zip Seattle and Bodsof										
Phone # 206- 382-8	2 4 3	FAX #	206-3	85-5208	D;	ite_3-11-89				
SITE NO.		PROJI	ECT NAME	3	P	URCHASE ORD	ER#			
7238 nesses Seld maridae 1728545										
SAMPLEIS (signature) PROJECT LOCATION										
Sim S. J. Stoo 6th Aug 8										
REMARKS SAMPLE DISPOSAL INFORMATION										
						spose after 30 d	ays			
						turn Samples	_			
	Date/Time	Type of	# of	Lab		ll for Instruction Analyse				
Sample #	Sampled	Sample	Jars	Sample A	y .	Request				
M78545	3/1/58 12:30	400	1	(a)	C		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			
7 . 11070	914,73 1-20	1170	- 	0 /		$c \omega r$	0, 20			
	ļ					· · · · · · · · · · · · · · · · · · ·				
										
				٠,						
				-						
				·		·				
							· ·			
SIGNAZURE	PR	INT NAME		COMPAN	<u> </u>	Date	Time			
Religionshed Branch The Market The Religionship of the Religionshi			Dew		9/1					
Recaived by: May It The	H. Ir A	1 him to	,	F7D	, .	7/1/1/	1:15ps			
Relinquished by:	- 11107	my (alln)		1-40	inc.	\$/11/4	1=151-			
						· · · - ,				
Received by:	•						-			

FORMS/COC

01/22/99

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 16, 1999

DUPLICATE COPY

INVOICE #99ACU0316-1

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M78545: Results of testing requested by Gerry Thompson for material submitted on March 11, 1999.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample \$80.00

Amount Due \$80.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

March 16, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on March 11, 1999 from your Metro Self Monitor, PO# M78545 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN, & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0316R.DOC